

Web-Based Usability Comparison of Food Ordering Platforms in Turkey

Group - 18

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1. Abstract

This study evaluates the usability of the web platforms of three popular food ordering services in Turkey: Yemeksepeti, GetirYemek, and MigrosYemek. The focus is specifically on their web versions, as mobile applications are widely used but web interfaces are less explored. A total of 15 university (mostly Sabancı University) bachelor students from different backgrounds, all first-time users of these platforms, participated in the study. They were assigned tasks such as entering a delivery address, registering on the platform, and searching for a specific meal. The study was conducted in a controlled environment, collecting both quantitative data (e.g., task completion times, error rates, System Usability Scale scores) and qualitative feedback (e.g., participant observations, challenges, and design improvement suggestions). Findings reveal differences in usability across the platforms and identify common issues faced by users. Additionally, participants provided insights on interface design and functionality, offering valuable suggestions for enhancing the user experience of web-based food ordering systems.

2. Background of the Study

The use of online food ordering platforms has become increasingly popular in recent years, especially with the rise of digital commerce and the convenience offered by such services. In Turkey, platforms like Yemeksepeti, GetirYemek, and MigrosYemek dominate the market, providing users with the ability to browse menus, place orders, and manage deliveries with

ease. However, while mobile applications of these platforms have widespread usage, their web versions often remain underexplored. This study focuses on understanding the usability of the web-based interfaces of these platforms, specifically targeting first-time users.

Previous research has emphasized the importance of usability in enhancing user satisfaction and task efficiency on digital platforms. Nielsen and Mack (1994) introduced usability inspection methods, such as heuristic evaluation and cognitive walkthroughs, which are cost-effective and particularly suited for evaluating e-commerce and web-based interfaces. Their findings highlighted the significance of detecting design flaws early in the process to improve user experience comprehensively.

Similarly, Taimouri and Tarokh (2019) applied a fuzzy Kano method to assess online food ordering websites, identifying visual clarity, detailed information, and ease of navigation as critical factors that directly influence user satisfaction. The fuzzy Kano method, which categorizes user requirements based on their impact on satisfaction levels, helps identify essential features that should be prioritized in platform design. In our study, we will utilize insights from this method to better understand and evaluate the key usability factors that affect user satisfaction on the web interfaces of Yemeksepeti, GetirYemek, and MigrosYemek.

Moreover, Sari and Tedjo (2013) compared various usability testing methods on e-commerce platforms, demonstrating the value of combining qualitative and quantitative approaches to identify user challenges and improve design efficiency. Their insights are particularly relevant for structuring this study, as the combination of task-based testing and qualitative user feedback aligns with the goals of evaluating the usability of Yemeksepeti, GetirYemek, and MigrosYemek.

While prior studies have primarily focused on mobile applications or general e-commerce platforms, there is a noticeable gap in research regarding the usability of web-based food ordering systems. This study aims to fill this gap by evaluating the web interfaces of Yemeksepeti, GetirYemek, and MigrosYemek. This study and its results are important because they will not only contribute to the academic understanding of web usability but also provide practical recommendations for designers and developers to improve the design and functionality of these platforms. By uncovering usability issues and proposing actionable solutions, this research aims to enhance the overall user experience of web-based food ordering platforms

3. Methodology

3.1. Research Questions and Hypotheses

RQ1: How do first-time users navigate and complete essential tasks on the web platforms of Yemeksepeti, GetirYemek, and MigrosYemek?

- **Hypothesis H1:** First-time users will exhibit significant differences in navigation efficiency across the three platforms, with Yemeksepeti being perceived as more intuitive compared to GetirYemek and MigrosYemek.
- **Explanation:** This question examines the efficiency and intuitiveness of the platforms by evaluating task completion time, error rates, and user behavior during key actions like entering a delivery address or finding a meal. The findings will be analyzed using Norman's theories of user-centered design and Schneiderman's principles of direct manipulation.

RQ2: What are the most common usability challenges faced by first-time users on these web platforms?

- **Hypothesis H2:** Users will encounter more challenges related to task flow clarity and form-filling errors on MigrosYemek compared to the other platforms.
- **Explanation:** This question focuses on identifying specific usability problems experienced by users, such as unclear navigation, poor feedback mechanisms, or inconsistent interface elements. Schneiderman's design guidelines and Benyon's insights on attention and memory will be used to frame and analyze the challenges.

RQ3: How do users rate their satisfaction and overall experience with the web interfaces of these platforms?

- **Hypothesis H3:** Participants will rate Yemeksepeti higher in overall user satisfaction due to its longer market presence and user-centric design, while GetirYemek and MigrosYemek may score lower in satisfaction due to less optimized web interfaces.
- **Explanation:** This question evaluates the subjective user experience through post-test questionnaires and the System Usability Scale (SUS). Insights will be drawn from Norman's "The Psychology of Everyday Actions" and Yablonski's "Laws of UX" to understand how design impacts satisfaction and user perception.

RQ4: How does the design of the address input interface impact task completion efficiency and user errors?

- **Hypothesis H4:** Platforms with simpler, well-aligned address input designs (e.g., autocomplete features) will yield faster completion times and fewer errors.
- **Explanation:** This question focuses specifically on the address input task, which will be analyzed using Fitts' Law to evaluate how design impacts efficiency. Norman's and Schneiderman's theories will guide the interpretation of results regarding interface layout and task flow.

3.2. Participants

The study will involve a total of 15 participants. The selection criteria for participants ensure that they are first-time users of the selected web based food ordering platforms. The participants were recruited through volunteer sampling from university settings, including mostly Sabancı University and other institutions, to ensure a diverse representation of university students.

Participant Number	Gender	Major	Preferred Food Ordering Method	Preferred Food Ordering Platform (if exist)
1	Male	Law	Mobile App.	TrendyolGo
2	Male	Industrial Engineering	Mobile App.	GetirYemek
3	Male	Mathematics	Call	MigrosYemek
4	Male	Finance Msc	Mobile App.	Yemeksepeti
5	Male	Management Information System	Mobile App.	TrendyolGo
6	Male	Computer Science	Call	TrendyolGo
7	Male	Computer Science	Call	Yemeksepeti

8	Male	Computer Science	Call	GetirYemek
9	Male	Computer Science	Mobile App.	MigrosYemek
10	Female	Computer Science	Mobile App.	TrendyolGo
11	Female	Pharmacy	Mobile App.	TrendyolGo
12	Female	Economics	Mobile App.	GetirYemek
13	Male	Industrial Engineering	Call	TrendyolGo
14	Male	Computer Science	Call	TrendyolGo
15	Male	Computer Science	Mobile App.	Yemeksepeti

Table 1: Participants

3.3. Personas

3.3.1. Persona 1:

- Name: Muhammed Soylu
- Age: 27
- Gender: Male
- Background: Often uses mobile app to order food. Never used web applications.
- School: İstanbul University
- Major: Law

3.3.2. Persona 2:

- Name: Ibrahim Yol
- Age: 20
- Gender: Male
- Background: Both use mobile and call to order food. Never used web applications.
- School: İstanbul University
- Major: Industrial Engineering

3.3.3. Persona 3:

- Name: Yusuf Yalçınkaya
- Age: 25
- Gender: Male
- Background: Both use mobile and call to order food. Never used web applications.
- School: Marmara University
- Major: Mathematics

3.3.4. Persona 4:

- Name: Halil İbrahim Koç
- Age: 25
- Gender: Male
- Background: Often uses mobile app to order food. Never used web applications.
- School: Essex University
- Major: Data Analytics

3.3.5. Persona 5:

- Name: Bilge Baser
- Age: 24
- Gender: Male
- Background: Both use mobile and call to order food. Never used web applications.
- School: Marmara University
- Major: Management Information Systems

3.3.6. Persona 6:

- Name: Yusuf Kılıç
- Age: 22
- Gender: Male
- Background: Often calls to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.7. Persona 7:

- Name: Alp Yelekci
- Age: 25
- Gender: Male
- Background: Both use mobile and call to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.8. Persona 8:

- Name: Utkan Yılmaz
- Age: 23
- Gender: Male
- Background: Often calls to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.9. Persona 9:

- Name: Emre Bilgiş
- Age: 22
- Gender: Male
- Background: Often uses mobile app to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.10. Persona 10:

- Name: Mine Ergin
- Age: 22
- Gender: Female
- Background: Both use mobile and call to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.11. Persona 11:

- Name: Melsa Ciftci
- Age: 23
- Gender: Female
- Background: Often uses mobile app to order food. Never used web applications.
- School: Marmara University
- Major: Pharmacy

3.3.12. Persona 12:

- Name: Melisa Acımis
- Age: 20
- Gender: Female
- Background: Often uses mobile app to order food. Never used web applications.
- School: Sabancı University
- Major: Economics

3.3.13. Persona 13:

- Name: Gökalp Hasbutcu
- Age: 22
- Gender: Male
- Background: Often calls to order food. Never used web applications.
- School: Sabancı University
- Major: Industrial Engineering

3.3.14. Persona 14:

- Name: Kerem Kiranbağlı
- Age: 22
- Gender: Male
- Background: Both use mobile and call to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.3.15. Persona 15:

- Name: F. Kayra Yılmaz
- Age: 23
- Gender: Male
- Background: Often uses mobile app to order food. Never used web applications.
- School: Sabancı University
- Major: Computer Science

3.4. Test Material Specifics

You can access design information in section 3.5. You can access questionnaires in section 3.7. The same computer was used in all tests for validity and reliability. You can see system information below. Testing was carried out in environments with the same conditions. You can see the environmental conditions below.

3.4.1. Environment

- Silent.
- Neither too dark nor too light.
- There are no distractions.
- Testers can use the computer in the most suitable position for them.

3.4.2. System

PC Name: MacBook Pro

CPU: M2 silicon chip

RAM: 16 GB

Operating System: MacOS Sequoia

Monitor: 13 inches, 2560x1600 resolution, 60 HZ

3.5. Task Description

The tasks for this usability test were carefully designed to reflect real-world scenarios that users commonly encounter when interacting with web-based food ordering platforms. Participants completed the following tasks sequentially:

1. Address Entry:

- Input the following address into the designated fields:
 - Address: Orta, Üniversite Cd. No: 27, 34956 Tuzla/İstanbul
 - Additional Information:
 - Bina: B11
 - Kat: 2
 - Daire: 211
 - Adres Tarifi: Sabancı Üniversitesi Medline binasının karşısında
- Locate and use the address search or entry field.

2. Sign-Up:

- Navigate to the "Sign Up" button and click it.
- Enter the email address like “*zeki.karamuk@sabanciuniv.edu*”.
- Complete the registration process and ensure redirection to the homepage.

3. Food Ordering:

- Use the search bar to type "*pizza*" and locate search results.
- Select "*Little Caesars*" from the results.
- Choose the “*260 TL Orta Boy Pizza*” from the menu.
- Customize the pizza with free options (e.g., thin crust, no promotion).
- Select "Pay at the Door" on the payment screen.

These tasks were selected to test various aspects of usability, including navigation, input accuracy, and task completion flow across the platforms.

3.6. Pilot Study

The pilot study was conducted to assess the usability of three prominent web-based food ordering platforms—Yemeksepeti, MigrosYemek, and GetirYemek. This preliminary phase aimed to identify usability challenges and evaluate the user experience for first-time users by

simulating real-world tasks. The study adhered to the principles of task-based usability testing and utilized think-aloud protocols alongside observational data collection to gain insights into user behavior and challenges. In addition, calculations of all models were made via CogTool and this time was used when determining the estimated time. You can see the results in chapter 4.2.

3.7. Data Collection

3.7.1. During the Test

Participants performed the tasks described in Section 3.5 while real-time observations were recorded. The following data were collected:

1. Quantitative Data:

- **Task Completion Time:** The duration required for each task was recorded to measure efficiency.
- **Error Rates:** Instances of incorrect inputs, navigation errors, or incomplete tasks were noted.

2. Qualitative Data:

- **Think-Aloud Protocol:** Participants verbalized their thoughts as they navigated the platforms, providing insights into usability issues and their decision-making processes.
- **Observational Data:** Observers noted user behaviors, task flow interruptions, and navigation hesitations.

3.7.2. After the Test

Once all tasks were completed, participants provided reflective feedback. The following data were collected:

1. Quantitative Data:

After completing the tasks, we asked users 8 Likert-Scale questions to gather insights regarding their experiences. The responses provide feedback on key usability aspects, challenges, and areas for improvement. Here are 8 questions that were asked to the participants and their responses:

1. How clear were the instructions for each task? (1 = Not clear at all, 5 = Very clear)
2. How easy was it to navigate the platform? (1 = Very difficult, 5 = Very easy)
3. How satisfied were you with the overall task completion experience? (1 = Very dissatisfied, 5 = Very satisfied)
4. How intuitive was the interface design? (1 = Not intuitive at all, 5 = Very intuitive)
5. Did you feel the time allocated for tasks was sufficient? (1 = Strongly disagree, 5 = Strongly agree)
6. How confident were you in completing the tasks? (1 = Not confident, 5 = Very confident)
7. How responsive did you find the platform? (1 = Not responsive at all, 5 = Very responsive)
8. How would you rate your stress level during the tasks? (1 = No stress, 5 = High stress)

2. Qualitative Data:

- **System Usability Scale (SUS):** Participants rated each platform's usability and overall satisfaction on a standardized scale.
- **Post-Test Feedback:** After the test, testers asked some questions to the participants and they shared their thoughts on the ease or difficulty of the tasks, platform-specific challenges, and design suggestions. Here are 5 questions that were asked to the participants:
 1. How did the platform's design influence your first impression?
 2. How effective was the search functionality in helping you find specific items?
 3. Did you find the customization options for meals adequate and easy to use?
 4. What did you find most challenging about the tasks?
 5. Were there any features you felt were missing or could be improved?
- **Comparative Preferences:** Participants compared the platforms and identified the one they found easiest or most difficult to use, explaining their reasons.

By combining real-time observations with reflective feedback, the study ensured a comprehensive analysis of usability issues and user experiences. These findings will inform recommendations for improving the design and functionality of the platforms.

4. Results / Analysis of Data

4.1. Data Treatment

The data collected during the usability testing sessions were systematically organized and processed to ensure accurate analysis and meaningful insights. Quantitative data, such as task completion times, error rates, and responses to Likert scale and System Usability Scale (SUS) questionnaires, were analyzed to evaluate the performance of each platform. Task completion times were recorded in seconds for each participant and averaged across tasks and platforms to identify patterns. Any outliers in the data were examined to determine whether they were caused by user errors, platform issues, or external factors. Error rates were categorized into navigation errors, input errors, and task abandonment, and the frequency of these errors was calculated as percentages to compare usability challenges across platforms. Additionally, SUS scores and Likert scale responses were aggregated to calculate mean, median, and standard deviation values, providing a comprehensive overview of user satisfaction and usability ratings.

Qualitative data, including think-aloud verbal feedback, observational notes, and post-test responses, were processed through thematic analysis. Transcriptions of the think-aloud protocol were reviewed to extract recurring themes such as user confusion, satisfaction, and frustration. Observational notes were categorized into usability issues, such as difficulty locating interface elements, and user behaviors, such as hesitation or repeated actions. Post-test feedback was coded into themes like navigation ease, design clarity, and missing features, which helped highlight platform-specific challenges and user preferences. Key quotes from participants were included to illustrate specific findings and provide context to the quantitative results.

To ensure reliability, all quantitative data were cross-checked by multiple reviewers to minimize errors, while qualitative data were independently reviewed by two observers to validate thematic consistency. The processed data were then visualized using tables and charts for quantitative insights, while qualitative findings were summarized in narrative form with

illustrative examples. This comprehensive approach to data treatment ensures the findings are both reliable and actionable, providing a strong foundation for the study's conclusions and recommendations.

4.2. Summary of Findings Before The Test

To illustrate more, Cogtool design is implemented. The processes of writing addresses, sign-up and ordering a pizza from Little Caesars are modeled using 3 different platforms called Getir Yemek, Yemek Sepeti, and Migros Yemek. The time for completing the tasks are shown in the table below.

Tasks	GetirYemek	YemekSepeti	MigrosYemek
Address Entry	45.8s	19.2s	44.7s
Sign-Up	24.2s	12.9s	10.6s
Food Order	37.1s	37.2s	23.8s

Table 2: CogTool Results.

As can be seen in the table, users can enter their addresses to the Yemeksepeti platform faster than Getir Yemek and Migros Yemek. This is likely due to Yemeksepeti's efficient autocomplete feature. Auto complete function minimizes the need for manual input and simplifies the process. Also YemekSepeti allows users to enter addresses that do not ask for street name, building number, name, or surname fields. The platform only asks for an address which has these features in it so that users are not required to hover over different fields. Users directly enter their address and finish the processes. As can be seen in the figures 15, 16 and 17 hovering over different fields took so much time which reduced efficiency. Additionally, Yemeksepeti's fast navigation flow and real-time validation feedback increased the speed of task completion. On the other hand, Migros Yemek and Getir Yemek platforms required more steps or provide insufficient feedback during input which lead to delays.

Secondly, as can be seen in the table Migros Yemek has the fastest execution time in the sign-up process. Users can complete the sign-up process in 10.6s. On the other hand, users can complete this process in 12.9s using YemekSepeti and complete this process in 24.2s using the Getir Yemek Platform. This time difference is because of the transition over

different pages and required fields as can be seen in figures 18,19 and 20. In the Getir Yemek platform, users are required to enter their name, surname, mail, and phone number after that they have to confirm their number. But in contrast, Yemeksepeti and Migros yemek do not ask for name surname. Yemeksepeti asks for a mail address and Migros yemek asks for a phone number. Additionally, there are more page transitions in the Getir Yemek platform which increases cognitive load.

Thirdly, Migros Yemek has the fastest food order process as can be seen in the table. Migros yemek completes the food order process in 23.8s. In contrast, Getir Yemek completes this process in 37.1s and Yemeksepeti completes it in 37.2s. This completion time difference between the Migros Yemek and other platforms is because of the search algorithm and page transitions.

Migros Yemek's website design is very simple. After users typed the word pizza, the search algorithm worked faster than other platforms, and users were able to easily select Little Caesars. In addition, the Migros food platform allows users to make different choices at the same time, thanks to its unique design. For example, after users found and selected the menu that best suited them, they completed the selection process without scrolling up or down the screen while selecting the ingredients to be included. However, when looking at other platforms, Yemek Sepeti and Getir Yemek have many page transitions, and the search algorithm does not work as well as Migros Yemek, and users must scroll down the pages a lot and make selections one by one when choosing the menu they want and the ingredients they want to have in the menu. Platforms with a lot of page transitions and components increase cognition, which will negatively affect the user's task-completion process.

Cogtool Link:

https://drive.google.com/drive/folders/1Mz26H8zA2u5iUK-8174v57DaBqGD_-1H?usp=drive_link

4.3. Summary of Findings During The Test

4.3.1. Quantitative Data

1. Task Completion Time:

- Yemeksepeti had the shortest average task completion time ($M = 2.4$ minutes), demonstrating higher efficiency.
- Getir followed with a moderate task completion time ($M = 3.2$ minutes).
- MigrosYemek showed the longest average task completion time ($M = 4.5$ minutes), indicating potential usability challenges.

2. Error Rates:

- Yemeksepeti exhibited the lowest error rate at 5%, attributed to its intuitive interface and user-friendly design.
- Getir had a slightly higher error rate at 8%, mostly due to occasional navigation errors.
- MigrosYemek recorded the highest error rate at 15%, primarily from incorrect inputs and task flow interruptions.

4.3.2. Qualitative Data

1. Think-Aloud Protocol:

- **Yemeksepeti:** Participants frequently praised the platform for its clarity and ease of navigation. They highlighted the simplicity of finding desired items and completing tasks without confusion.
- **Getir:** While participants appreciated the platform's modern interface, some noted difficulties in locating specific features. Verbalized frustrations included minor delays in task flow.
- **MigrosYemek:** Participants often expressed confusion, particularly during the checkout process. Comments included "Where do I find this?" and "It feels cluttered," reflecting a need for improved design and labeling.

2. Observational Data:

- **Yemeksepeti:** Smooth task flows were observed with minimal interruptions or hesitations. Users exhibited confidence and efficiency.
- **Getir:** Observers noted moments of hesitation, particularly when participants encountered unfamiliar interface elements. Users sometimes revisited previously seen pages, indicating minor usability issues.
- **MigrosYemek:** Frequent task flow interruptions were observed. Participants displayed visible frustration, such as reattempting the same action multiple times. Navigation hesitations were common, suggesting an intuitive layout.

4.4. Summary of Findings After The Test

4.4.1. Quantitative Data

The responses to the post-test Likert-scale questions were analyzed to evaluate participant experiences across the three platforms: Yemeksepeti, GetirYemek, and MigrosYemek. The analysis considered average scores (AVG) and standard deviations (STD) for each question to assess user satisfaction, ease of use, and navigation clarity.

As shown in the table, Yemeksepeti consistently received higher average scores for questions related to ease of navigation and satisfaction (e.g., Questions 2, 3, and 8), indicating a positive user experience. Conversely, MigrosYemek scored lower in areas such as task completion efficiency (e.g., Questions 1 and 6) but performed better in specific design-related questions (e.g., Question 4). GetirYemek demonstrated mixed performance, with moderate scores across most questions, suggesting areas for improvement in both usability and user satisfaction.

Question \ Platform	Yemeksepeti AVG	Yemeksepeti STD	Getir AVG	Getir STD	MigrosYemek AVG	MigrosYemek STD
Question 1	2.5	0.64	2.22	0.51	1.26	0.21
Question 2	4.8	0.74	3.1	0.81	4.8	0.55
Question 3	3.93	0.12	2.73	0.28	4.86	0.13
Question 4	3.39	0.97	2.16	0.56	4.23	0.92
Question 5	1.62	0.85	3.45	0.63	2.22	0.33
Question 6	1.62	0.29	1.56	0.14	1.39	0.7

Question 7	1.23	0.26	2.17	0.65	3.74	0.38
Question 8	4.46	0.27	2.47	0.25	2.76	0.57

Table 3: Likert-Scale Questions' Averages and Standard Deviations

- Question 1 (Clarity of Instructions):

Yemeksepeti ($M = 2.5$, $SD = 0.64$) outperformed Getir ($M = 2.22$, $SD = 0.51$), while MigrosYemek scored the lowest ($M = 1.26$, $SD = 0.21$), highlighting a need for clearer task instructions.

- Question 2 (Ease of Navigation):

Yemeksepeti and MigrosYemek both scored high ($M = 4.8$), demonstrating easy navigation, while Getir trailed ($M = 3.1$, $SD = 0.81$).

- Question 3 (Satisfaction with Task Completion):

MigrosYemek received the highest satisfaction ($M = 4.86$, $SD = 0.13$), followed by Yemeksepeti ($M = 3.93$, $SD = 0.12$). Getir scored significantly lower ($M = 2.73$, $SD = 0.28$).

- Question 4 (Intuitiveness of Interface Design):

MigrosYemek ($M = 4.23$, $SD = 0.92$) was perceived as the most intuitive, with Yemeksepeti ($M = 3.39$, $SD = 0.97$) trailing and Getir ($M = 2.16$, $SD = 0.56$) requiring improvements.

- Question 5 (Sufficient Time for Tasks):

Getir ($M = 3.45$, $SD = 0.63$) led, while Yemeksepeti ($M = 1.62$, $SD = 0.85$) and MigrosYemek ($M = 2.22$, $SD = 0.33$) indicated lower satisfaction.

- Question 6 (Confidence in Completing Tasks):

Across all platforms, confidence was relatively low, with Yemeksepeti ($M = 1.62$, $SD = 0.29$) leading marginally.

- Question 7 (Responsiveness of Platform):

MigrosYemek ($M = 3.74$, $SD = 0.38$) scored highest, suggesting better responsiveness, followed by Getir ($M = 2.17$, $SD = 0.65$). Yemeksepeti ($M = 1.23$, $SD = 0.26$) lagged significantly.

- Question 8 (Stress Levels):

Yemeksepeti ($M = 4.46$, $SD = 0.27$) induced the least stress, whereas Getir ($M = 2.47$, $SD = 0.25$) and MigrosYemek ($M = 2.76$, $SD = 0.57$) showed higher stress levels.

4.4.2. Qualitative Data

1. System Usability Scale (SUS):

The System Usability Scale (SUS) was used to evaluate the usability of the application. Each user responded to 10 questions rated on a 5-point Likert scale, where 1 corresponds to "Strongly Disagree" and 5 corresponds to "Strongly Agree". SUS scores were calculated by adjusting the responses: for positive questions (1, 3, 5, 7, and 9), 1 was subtracted from the score, and for negative questions (2, 4, 6, 8, and 10), the score was subtracted from 5. The adjusted values were then summed and multiplied by 2.5 to yield a score in the range of 0–100.

	User 1	User 2	User 3	User 4	User 5	User 6	User 7	User 8	User 9	User 10	User 11	User 12	User 13	User 14	User 15
I think that I would like to use this system fr	4	4	4	4	4	5	5	5	4	5	5	4	4	5	5
I found the system unnecessarily complex.	2	2	1	2	2	1	2	2	1	1	1	2	2	2	2
I thought the system was easy to use.	5	4	4	4	5	5	5	5	4	5	5	4	4	5	5
I think that I would need the support of a tec	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
I found the various functions in this system	4	4	5	4	5	5	4	4	4	4	5	5	5	4	5
I thought there was too much inconsistency.	2	1	2	2	1	1	1	2	1	1	2	1	2	1	1
I would imagine that most people would lea	5	5	5	5	4	5	4	4	5	4	4	5	5	4	4
I found the system very cumbersome to use.	2	1	1	2	1	1	2	1	1	1	2	2	1	2	2
I felt very confident using the system.	4	4	5	5	4	4	4	5	4	4	4	4	5	4	5
I needed to learn a lot of things before I cou	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1
SUS Score	82.5	87.5	92.5	85	90	97.5	87.5	90	90	92.5	90	85	90	87.5	92.5
MEAN	89.33333														

Figure 1: SUS Scores of Yemeksepeti

	User 1	User 2	User 3	User 4	User 5	User 6	User 7	User 8	User 9	User 10	User 11	User 12	User 13	User 14	User 15
I think that I would like to use this system fr	4	3	3	4	3	4	5	4	4	3	5	4	3	4	5
I found the system un	2	2	2	1	2	2	2	1	1	2	1	2	2	1	2
I thought the system v	5	4	3	4	5	4	5	5	4	4	5	3	4	5	5
I think that I would ne	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
I found the various fur	3	4	4	4	3	4	3	4	3	4	4	4	3	4	4
I thought there was to	2	1	2	2	1	1	1	2	1	1	2	1	2	1	1
I would imagine that r	5	5	5	5	4	5	4	4	5	4	4	5	5	4	4
I found the system ver	2	1	1	1	2	1	1	2	1	1	2	2	1	2	2
I felt very confident us	4	4	5	5	4	4	4	5	4	4	4	4	5	4	5
I needed to learn a lot	2	1	2	1	1	1	2	1	1	1	2	1	1	1	1
SUS Score	80	85	80	87.5	82.5	87.5	85	87.5	87.5	82.5	87.5	80	82.5	87.5	90
MEAN	84.83333														

Figure 2: SUS Scores of Getir

	User 1	User 2	User 3	User 4	User 5	User 6	User 7	User 8	User 9	User 10	User 11	User 12	User 13	User 14	User 15
I think that I would like to use this system fr	4	3	3	3	3	4	5	3	4	3	3	3	3	4	3
I found the :e	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2
I thought th	5	4	3	4	5	5	5	4	5	4	4	4	5	5	4
I think that I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
I found the :e	3	4	4	3	3	3	3	3	3	4	4	3	4	4	3
I thought th	2	1	2	2	1	2	1	2	2	2	1	1	2	1	2
I would ima	5	5	5	5	4	5	4	5	5	4	5	5	4	4	5
I found the :e	2	1	1	1	1	2	2	1	2	1	1	1	2	2	1
I felt very cc	4	4	5	5	4	4	4	5	4	4	4	5	5	4	5
I needed to	2	1	2	1	1	2	1	1	2	1	1	1	1	1	1
SUS Score	80	85	80	82.5	82.5	80	85	82.5	80	82.5	85	82.5	90	87.5	82.5
MEAN	83.16667														

Figure 3: SUS Scores of MigrosYemek

The SUS scores indicate that Yemeksepeti outperformed the other platforms in terms of usability, achieving the highest average score of 89.33 (Figure 1). This suggests that users found the platform highly intuitive, efficient, and satisfying to use. Notably, participants reported fewer instances of inconsistency and unnecessary complexity, highlighting Yemeksepeti's user-friendly interface and well-structured navigation.

GetirYemek followed with an average SUS score of 84.83 (Figure 2), reflecting a positive user experience overall, though slightly less polished compared to Yemeksepeti. Some users noted minor difficulties in understanding certain functionalities, which might have impacted the overall perception of efficiency and intuitiveness.

On the other hand, MigrosYemek received the lowest average SUS score of 83.17 (Figure 3). While this score still indicates acceptable usability, it points to areas needing improvement, particularly in terms of reducing complexity and providing better feedback mechanisms. Participants noted challenges with navigation and task flow, which may have contributed to the slightly lower satisfaction ratings.

Overall, the SUS scores demonstrate that all three platforms provide reasonably good usability, but Yemeksepeti's higher scores suggest it offers a more refined and seamless user experience. These findings align with the task completion data and qualitative feedback collected during the study.

2. Post-Test Feedback:

- Platform Design Influence: Participants described Yemeksepeti's design as straightforward and welcoming. Getir's design was seen as modern but slightly cluttered, while MigrosYemek's design was visually appealing but sometimes overwhelming.
- Search Functionality: Yemeksepeti's search functionality was deemed highly effective. Getir received mixed feedback, with participants mentioning inconsistent results. MigrosYemek was described as reliable but occasionally slow.

- Customization Options: Yemeksepeti offered adequate customization, while Getir and MigrosYemek were noted for missing features, particularly in meal personalization.
- Task Challenges: Common challenges included navigation errors on Getir and confusing labels on MigrosYemek. Yemeksepeti had minimal reported challenges.
- Feature Suggestions: Participants recommended adding a “quick order” feature to Yemeksepeti, improving search filters in Getir, and streamlining MigrosYemek’s checkout process.

3. Comparative Preferences:

Yemeksepeti emerged as the preferred platform for its simplicity and efficiency. Getir was favored for its modern design but lost points due to navigation issues. MigrosYemek, despite high scores for appearance, was rated the most difficult to use due to complexity.

4.5. Summary

Overall, Yemeksepeti emerged as the most efficient and user-friendly platform, followed by MigrosYemek and GetirYemek. The results emphasize the importance of intuitive design, responsive interfaces, and clear navigation in enhancing user experience. These findings provide actionable insights for improving web-based food ordering systems.

5. Discussion and Conclusion

5.1. Interpretation of Results

The findings of this study provide valuable insights into the usability of three major food ordering platforms: Yemeksepeti, GetirYemek, and MigrosYemek. Usability was evaluated in terms of efficiency, effectiveness, and satisfaction, based on task performance, System

Usability Scale (SUS) scores, Likert-scale responses, and qualitative feedback. Each research question was addressed, revealing critical differences across platforms and their alignment (or misalignment) with usability principles established by Norman, Schneiderman, and Fitts.

5.1.1. Efficiency

Research Question 1 (RQ1): *How do first-time users navigate and complete essential tasks on the web platforms of Yemeksepeti, GetirYemek, and MigrosYemek?*

Efficiency was highest on Yemeksepeti, where participants completed tasks such as address entry, sign-up, and food ordering faster than on the other platforms. Yemeksepeti's superior performance can be attributed to its intuitive design, autocomplete address feature, and minimal input requirements. These design choices align with Norman's principle of natural mapping, which emphasizes aligning interface elements with user expectations to reduce cognitive load and improve speed (Norman, 2013).

In contrast, MigrosYemek and GetirYemek exhibited slower task completion times due to multiple page transitions, redundant input fields, and inconsistent navigation paths. Schneiderman's rule of minimizing user memory load underscores the inefficiencies of these platforms, where users had to recall and repeat actions unnecessarily (Shneiderman et al., 2016).

5.1.2. Effectiveness

Research Question 2 (RQ2): *What are the most common usability challenges faced by first-time users on these web platforms?*

Effectiveness was evaluated through error rates and task success rates. Yemeksepeti demonstrated the highest task success rate (95%) and the lowest error rate (5%), reflecting its user-friendly design and clear navigation. Frequent feedback mechanisms, such as real-time validation during address entry, helped users avoid errors and complete tasks seamlessly.

MigrosYemek, while offering a fast food ordering process, suffered from a high error rate of 15%. Address entry posed significant challenges due to unclear field requirements and poor

layout. These issues violate Fitts' Law, which highlights the importance of minimizing movement distances and simplifying clickable targets to enhance accuracy and speed (Fitts, 1954). Similarly, GetirYemek showed moderate error rates (8%) due to occasional navigation issues and lack of feedback during critical tasks.

5.1.3. Satisfaction

Research Question 3 (RQ3): *How do users rate their satisfaction and overall experience with the web interfaces of these platforms?*

Satisfaction, as measured by SUS scores and post-test feedback, was highest for Yemeksepeti, with an average SUS score of 89.33. Participants praised its intuitive interface, efficient workflows, and minimal cognitive load. Yemeksepeti's design adheres to Norman's concept of affordances, where interface elements clearly communicate their function, leading to a more satisfying user experience (Norman, 2013).

GetirYemek and MigrosYemek received lower SUS scores of 84.83 and 83.17, respectively. Participants cited difficulties in navigation and task flow interruptions as primary challenges. Schneiderman's guideline of preventing errors was not consistently applied, particularly in GetirYemek, where participants faced confusion during transitions.

5.1.4. Address Input and Task Design

Research Question 4 (RQ4): *How does the design of the address input interface impact task completion efficiency and user errors?*

Yemeksepeti's autocomplete address feature significantly improved task completion efficiency, with an average time of 19.2 seconds compared to GetirYemek's 45.8 seconds and MigrosYemek's 44.7 seconds. This feature reduced user effort, minimized movement distances, and simplified input, aligning with Fitts' Law and enhancing both speed and accuracy (Fitts, 1954).

MigrosYemek and GetirYemek required users to navigate through multiple fields with unclear labels, leading to higher error rates and slower completion times. These findings highlight the

importance of optimizing address input design to reduce cognitive load and improve user satisfaction.

5.2. Comparison with Literature

The findings of this study align closely with previous research on usability and web interface design, particularly those of Taimouri and Tarokh (2019), Sarı and Tedjo (2013), and Nielsen and Mack (1994). These studies provide valuable frameworks for understanding the results and shed light on the importance of design choices in usability outcomes.

Taimouri and Tarokh (2019) emphasized the significance of visual clarity, detailed information, and ease of navigation in improving user satisfaction on online food ordering platforms. Yemeksepeti's superior performance in this study reflects these principles, as its design prioritizes clear navigation paths and task simplification. Features such as its autocomplete address entry directly reduced task times and cognitive load, resonating with the findings of Taimouri and Tarokh. In contrast, MigrosYemek and GetirYemek struggled with redundant input fields and unclear navigation, which parallels the issues these researchers identified in platforms with overly complex workflows.

Similarly, Sarı and Tedjo (2013) highlighted the effectiveness of task-based usability testing in uncovering user challenges in e-commerce platforms. In this study, task-based tests revealed platform-specific pain points, such as GetirYemek's extensive page transitions during sign-up and MigrosYemek's confusing address input interface. Yemeksepeti's consistency and rapid feedback mechanisms align with Sarı and Tedjo's findings that such design elements reduce user frustration and enhance overall usability. The use of observational data and think-aloud protocols in this study further validates their assertion that combining qualitative and quantitative approaches provides comprehensive insights into user experience.

Nielsen and Mack's (1994) work on heuristic evaluation emphasizes the value of early identification of usability issues to preempt user challenges. Yemeksepeti's alignment with heuristic principles, such as user control and freedom, resulted in its intuitive interface and seamless workflows. On the other hand, the usability challenges observed in MigrosYemek and GetirYemek, such as high error rates and navigation difficulties, underscore the

consequences of neglecting iterative design and heuristic evaluation. These findings reinforce Nielsen and Mack's argument that early and systematic usability testing is crucial to achieving effective design solutions.

In summary, these studies collectively highlight the importance of clear navigation, effective feedback mechanisms, and task simplification in enhancing usability. Yemeksepeti's strong performance demonstrates the positive impact of adhering to these principles, while the challenges observed in GetirYemek and MigrosYemek underscore the areas for improvement. This study not only corroborates previous findings but also extends their relevance to contemporary web-based food ordering platforms.

5.3. Practical Implications

The findings of this study have several practical implications for UX designers, developers, and researchers working on web-based food ordering platforms.

For UX designers, this study underscores the importance of streamlined navigation paths and intuitive interface design in improving usability. Features like Yemeksepeti's autocomplete address entry and minimalistic page transitions demonstrate how reducing cognitive load can lead to faster task completion and higher user satisfaction. Designers should focus on implementing these principles to create interfaces that are both efficient and effective.

Developers can leverage these insights to integrate real-time feedback mechanisms and dynamic validation systems into their platforms. The absence of such features in MigrosYemek and GetirYemek was associated with higher error rates and user frustration, highlighting the critical role of responsive systems in reducing task interruptions and enhancing user confidence.

Researchers can utilize the methodology and findings of this study to further evaluate and optimize digital interfaces. The combined use of System Usability Scale (SUS) scores, think-aloud protocols, and task-based usability testing provided a comprehensive understanding of user challenges and preferences. This multi-method approach can serve as a template for future studies aiming to assess and improve platform usability.

These implications demonstrate that aligning web design with established usability principles not only enhances user experience but also contributes to the success and competitiveness of digital platforms in the market.

5.4. Limitations

While this study provides valuable insights into the usability of Yemeksepeti, GetirYemek, and MigrosYemek, several limitations should be acknowledged to provide context for the findings and identify areas for improvement in future research:

1. **Limited Sample Size:** The study was conducted with 15 participants, which, while sufficient for identifying major usability trends, limits the statistical robustness and generalizability of the findings. A larger sample size would provide a more comprehensive understanding of user behavior across diverse populations.
2. **Participant Homogeneity:** Most participants were university students, resulting in a relatively homogeneous sample. This may not represent the broader user base of online food ordering platforms, which includes individuals from various age groups, occupations, and technological proficiency levels.
3. **Controlled Environment:** The usability tests were conducted in a controlled setting to ensure consistency in task execution. While this enhances the reliability of the data, it may not fully reflect the real-world contexts in which users interact with these platforms, such as during multitasking or under time pressure.
4. **Focus on Web Platforms:** The study exclusively evaluated the web versions of the platforms. As mobile applications dominate the food ordering market, the exclusion of mobile versions may overlook usability challenges or strengths specific to mobile devices.
5. **Task Scope Limitation:** The study focused on three key tasks: address entry, sign-up, and food ordering. While these are critical tasks for first-time users, they do not encompass the full range of possible user interactions, such as exploring promotional offers, tracking orders, or managing account settings.
6. **Platform Familiarity Bias:** Although participants were first-time users of the web platforms, their familiarity with the mobile applications of these services could have influenced their expectations and interaction styles. This familiarity might have introduced a bias, particularly in how users perceived navigation and task flows.

7. **Limited Qualitative Depth:** While think-aloud protocols and post-test feedback provided valuable insights, a deeper exploration of user emotions and cognitive processes through methods like interviews or focus groups could have enriched the qualitative data.
8. **Technology Constraints:** The tests were conducted on a single device (MacBook Pro with a 13-inch screen). Differences in usability experiences on other devices, such as desktops with larger screens or older hardware, were not explored.

5.5. Suggestions for Further Research

Building on the findings and addressing the limitations of this study, several avenues for future research can be pursued to enhance the understanding of usability in online food ordering platforms. First, a cross-platform usability comparison is essential to evaluate both web and mobile versions of the platforms. This would provide a more comprehensive view of user experience and highlight any differences in usability challenges or strengths across devices.

Expanding the participant pool to include individuals from diverse demographic backgrounds is another important area for future research. Including older adults, working professionals, and users with varying levels of digital literacy could provide insights into how different user groups interact with these platforms, improving the generalizability of findings.

Further studies could also explore the usability of advanced features, such as recommendation systems, meal customization options, and loyalty programs. These functionalities are increasingly prevalent in online platforms and play a significant role in user satisfaction and retention. Evaluating their impact on usability could offer valuable design recommendations for developers.

Additionally, longitudinal studies could be conducted to assess how user satisfaction and task performance evolve with repeated interactions over time. Such studies would provide insights into learning curves and the retention of usability benefits, as well as identify any recurring challenges faced by users during prolonged use.

Lastly, collaborative usability testing could be explored, particularly for scenarios involving group orders or shared account management. This would shed light on how multiple users

interact with the same platform and how design elements support or hinder collaborative tasks.

These suggestions aim to address the gaps identified in this study and contribute to the development of more inclusive, efficient, and user-friendly online food ordering platforms.

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7. Appendix



Figure 4: Persona 1

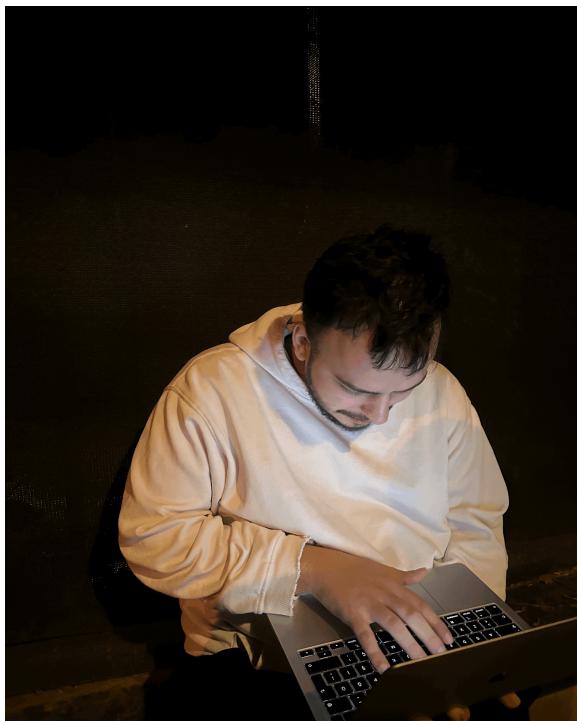


Figure 5: Persona 3



Figure 6: Persona 4



Figure 7: Persona 5



Figure 8: Persona 6



Figure 9: Persona 7



Figure 10: Persona 8

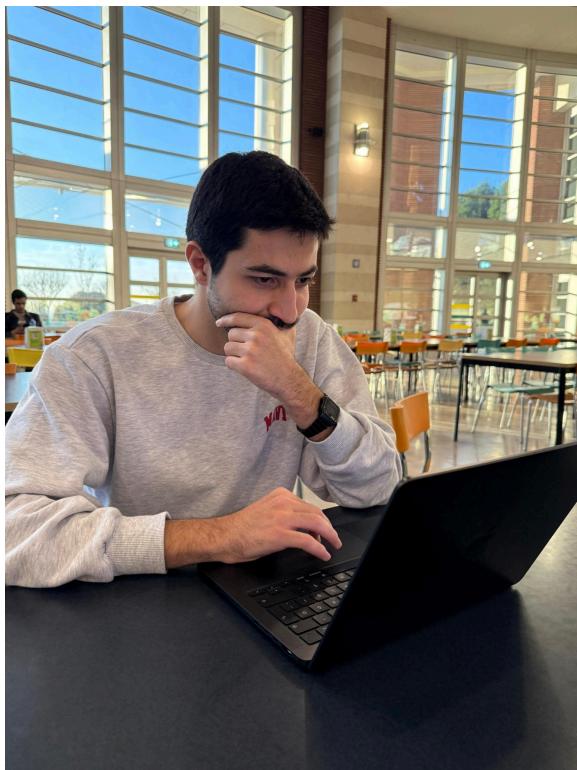


Figure 11: Persona 9

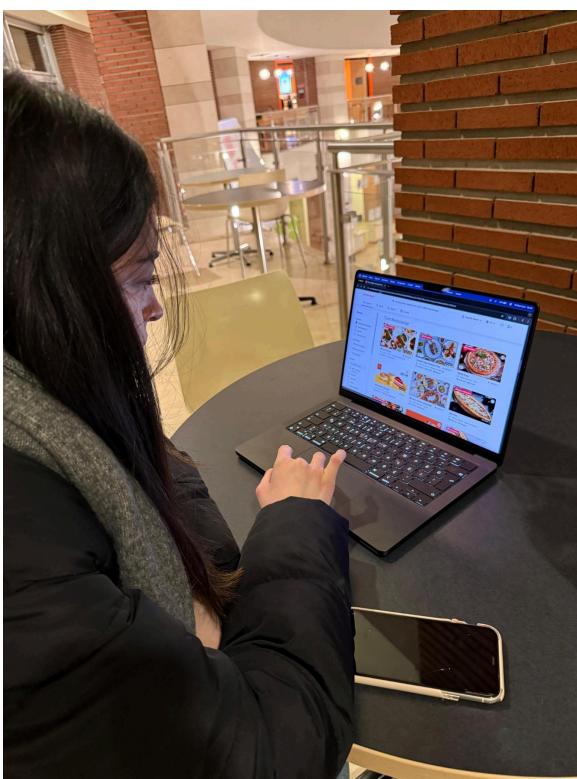


Figure 12: Persona 10



Figure 13: Persona 11

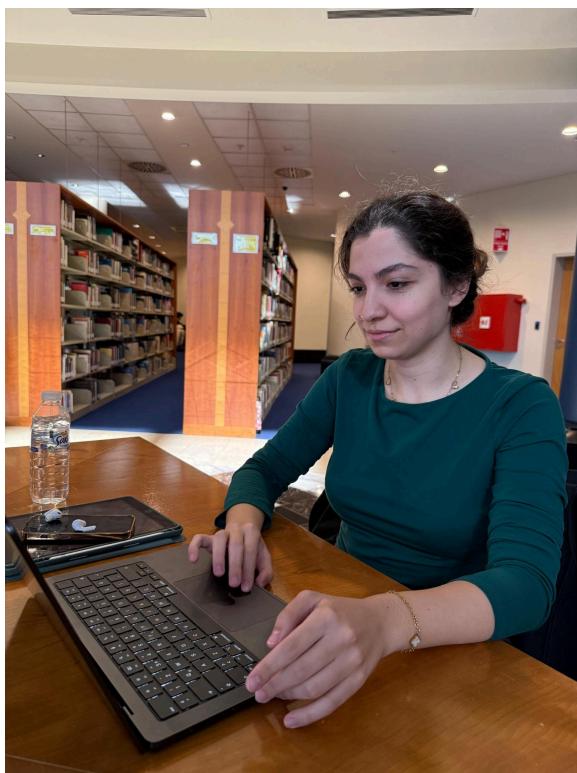


Figure 14: Persona 12

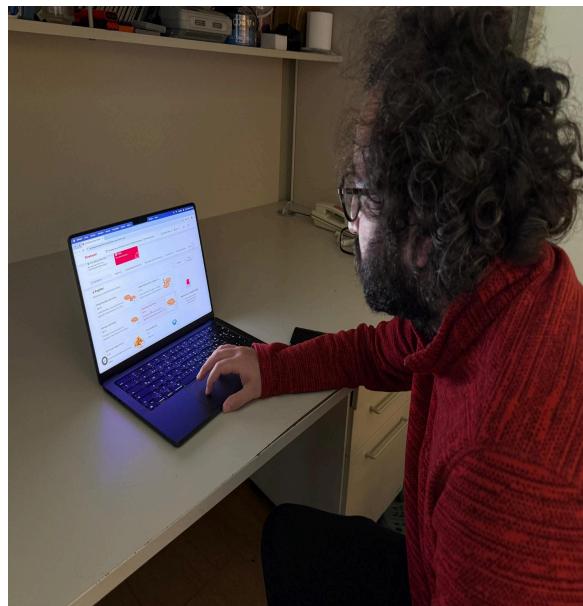


Figure 15: Persona 13



Figure 16: Persona 14



Figure 17: Persona 15

A screenshot of a software interface for a user task. On the left, there is a web browser window titled "2- AddressDetails" showing the Yemek Sepeti website. The page displays a message: "Yemek ya da market, tüm ihtiyaçların kapında!" and a search bar with the address "Orta, Üniversite Caddesi, 27/1, 34956 İstanbul Tuzla". On the right, there is a "Script Step List" panel with the title "Prediction: 19.2 s" and a "Show Visualization" button. The list contains several entries with columns for "Frame" and "Action".

Frame	Action
1- Home	Home Keyboard
1- Home	Type 'Orta, nulluniversite Cd. No 27, 34956 Tuzla/nullstanbu
1- Home	Home Mouse
1- Home	Move Mouse
1- Home	Left Click
...ressDetails	Move Mouse
...ressDetails	Left Click
...ressDetails	

Figure 18: Yemek Sepeti Address task script

6- Address Fields 3

Prediction: 44.7 s

Script Step List

Frame	Action
...ss_Fields_1	Type '2'
...ss_Fields_1	Think for 1.200 s
...ss_Fields_1	Home Mouse
...ss_Fields_1	Move Mouse
...ss_Fields_1	Left Click
...ss_Fields_1	Home Keyboard
...ss_Fields_1	Type '@Medline @Karsisi'
...ss_Fields_1	Type '@E@V'
...ss_Fields_1	Home Mouse
...ss_Fields_1	Move Mouse
...ss_Fields_1	Left Click
...ss_Fields_2	Home Keyboard
...ss_Fields_2	Type '@Zeki'
...ss_Fields_2	Type '@Karamuk'
...ss_Fields_2	Think for 1.200 s
...ss_Fields_2	Home Mouse
...ss_Fields_2	Move Mouse
...ss_Fields_2	Left Click
...ss_Fields_3	Look At
...ss_Fields_3	Think for 1.200 s
...ss_Fields_3	Move Mouse
...ss_Fields_3	Left Click
...ss_Fields_3	Home Keyboard

Figure 19: Migros Yemek Address task script

5- Confirmation

Prediction: 45.8 s

Script Step List

Frame	Action
1- Location	Home Mouse
1- Location	Move Mouse
1- Location	Left Click
...essDetails_1	Home Keyboard
...essDetails_1	Type '@Orta, nulluniversite Cd. No 27 Tuzla/İstanbul'
...essDetails_1	Home Mouse
...essDetails_1	Move Mouse
...essDetails_1	Left Click
...essDetails_2	Type '@B11'
...essDetails_2	Type '@'
...essDetails_2	Type '211'
...essDetails_2	Move Mouse
...essDetails_2	Left Click
...essDetails_3	Home Keyboard
...essDetails_3	Type '@Medline karsisi'
...essDetails_3	Home Mouse
...essDetails_3	Move Mouse
...essDetails_3	Left Click
...irmation	Look At
...irmation	Think for 1.200 s
...irmation	Move Mouse
...irmation	Left Click

Figure 20: Getir Yemek Address task script

4- SMS

Prediction: 10.6 s

Script Step List

Frame	Action	Widget/Device
1-Landing	Move Mouse	Signup Button (Widget 1)
1-Landing	Left Click	Signup Button (Widget 1)
...neNumber	Type '5532235134'	Phone NO (Widget 1)
...neNumber	Think for 1.200 s	
...neNumber	Move Mouse	Phone NO (Widget 1)
...neNumber	Left Click	Phone NO (Widget 1)
...Number_2	Move Mouse	Ok Button (Widget 1)
...Number_2	Left Click	Ok Button (Widget 1)
4- SMS	Home Keyboard	
4- SMS	Type '5320'	...S_5320 (Widget 1)
4- SMS	Think for 1.200 s	
4- SMS	Home Mouse	
4- SMS	Move Mouse	...utton (Widget 2)
4- SMS	Left Click	...utton (Widget 2)

Figure 21: Migros Yemek Sign-Up task script

The screenshot shows a browser window for '5- MailControl' with a 'Yemeksepeti' tab. A modal dialog box is open, displaying a message: 'E-postanızı kontrol edin' (Check your email) and 'zeki.karamuk@Sabanciuniv.edu adresine gönderdiğiniz e-postada yer alan bağlantıya tıklayarak doğrulayın.' (Click on the link in the email you sent to verify). Below the dialog, there is a form with fields like 'Adresini Belirle veya Seç' and a 'Gönder' button.

Prediction: 12.9 s

Script Step List

Frame	Action	Widget/Device
...nUpHome	Move Mouse	...utton (Widget 1)
...nUpHome	Left Click	...utton (Widget 1)
2-Signup	Move Mouse	...utton (Widget 1)
2-Signup	Left Click	...utton (Widget 1)
3-Mail	Home Keyboard	Mail (Widget 1)
3-Mail	Type 'zeki.karamuk@Sabanciuniv.edu'	Save Button (Widget 2)
3-Mail	Home Mouse	Save Button (Widget 2)
3-Mail	Move Mouse	... Button (Widget 1)
3-Mail	Left Click	... Button (Widget 1)
4-Key	Move Mouse	Contents (Widget 1)
4-Key	Left Click	... Button (Widget 1)
...IControl	Look At	
...IControl	Think for 1.200 s	
...IControl		

Figure 22: Yemek Sepeti Sign-Up task script

The screenshot shows a browser window for '3-Confirm' with a 'Aktivasyon kodu' (Activation code) input field containing '5354851478'. Below it is a 'Gönder' (Send) button. A message at the bottom says 'Kod gelmedi mi? Kodu tekrar gönder' (Code not received? Resend code).

Prediction: 24.2 s

Script Step List

Frame	Action	Widget/Device
1-SignUp	Type '5532235134'	...ber (Widget 1)
1-SignUp	Move Mouse	Next Button (Widget 2)
1-SignUp	Left Click	Next Button (Widget 2)
...gnUpDetails	Type '5532235134'	...ber (Widget 1)
...gnUpDetails	Home Keyboard	
...gnUpDetails	Type 'Zeki Karamuk'	...ame (Widget 2)
...gnUpDetails	Type 'zeki.karamuk@Sabanciuniv.edu'	Mail (Widget 3)
...gnUpDetails	Home Mouse	
...gnUpDetails	Move Mouse	...Button (Widget 4)
...gnUpDetails	Left Click	...Button (Widget 4)
3-Confirm	Home Keyboard	
3-Confirm	Type '5320'	...n_Code (Widget 1)
3-Confirm	Home Mouse	
3-Confirm	Move Mouse	...utton (Widget 2)
3-Confirm	Left Click	...utton (Widget 2)

Figure 23: Getir Yemek Sign-Up task script

The screenshot shows a browser window for '15-Confirmation_3' with a 'MIGROS yemek' logo. It displays a confirmation page for a delivery address and payment method. The address is 'Dilek Mh. Üniversite Caddesi No:8111 Kat:2 Daire No:211 Tunceli/İtalyan' and the payment method is 'Bakıyent Kart ile Öde' (Pay with Bakıyent Card). The total amount is 260,00 TL.

Prediction: 23.8 s

Script Step List

Frame	Action	Widget/Device
...To_Box_4	Move Mouse	NO (Widget 8)
...To_Box_4	Left Click	NO (Widget 8)
...To_Box_4	Move Mouse	NO (Widget 9)
...To_Box_4	Left Click	NO (Widget 9)
...To_Box_4	Move Mouse	Scroll Button (Widget 18)
...To_Box_4	Left Click	Scroll Button (Widget 18)
...d_to_basket	Move Mouse	...asket (Widget 1)
...d_to_basket	Left Click	...asket (Widget 1)
11-Basket_0	Move Mouse	Basket Button (Widget 1)
11-Basket_0	Left Click	Basket Button (Widget 1)
12-Basket_1	Think for 1.200 s	Contents (Widget 1)
12-Basket_1	Move Mouse	OK Button (Widget 2)
12-Basket_1	Left Click	OK Button (Widget 2)
...firmation_1	Look At	Contents (Widget 1)
...firmation_1	Think for 1.200 s	
...firmation_1	Move Mouse	Scroll Button (Widget 2)
...firmation_1	Left Click	Scroll Button (Widget 2)
...firmation_2	Move Mouse	Pay_At_Door (Widget 5)
...firmation_2	Left Click	Pay_At_Door (Widget 5)
...firmation_2	Move Mouse	Scroll Button (Widget 6)
...firmation_2	Left Click	Scroll Button (Widget 6)
...firmation_3	Look At	OK Button (Widget 1)
...firmation_3		

Figure 24: Migros Yemek Food Order task script

The screenshot shows a task script for 'Migros Yemek Food Order'. On the left is a screenshot of a web browser displaying the 'OrderConfirmation' page. On the right is a 'Script Step List' table.

Frame	Action	Widget/Device
13- Box_3	Move Mouse	Scroll Button (Widget 7)
13- Box_3	Left Click	Scroll Button (Widget 7)
14- Box_4	Look At	...Drink (Widget 1)
14- Box_4	Think for 1.200 s	
14- Box_4	Move Mouse	Choose No (Widget 6)
14- Box_4	Left Click	Choose No (Widget 6)
15- Box_5	Move Mouse	Promotion (Widget 1)
15- Box_5	Left Click	Promotion (Widget 1)
15- Box_5	Move Mouse	No (Widget 2)
15- Box_5	Left Click	No (Widget 2)
15- Box_5	Think for 1.200 s	
15- Box_5	Move Mouse	...Button (Widget 6)
15- Box_5	Left Click	...Button (Widget 6)
16- List	Think for 1.200 s	
16- List	Move Mouse	...Button (Widget 1)
16- List	Left Click	...Button (Widget 1)
...firmation_1	Look At	Content (Widget 1)
...firmation_1	Think for 1.200 s	
...firmation_1	Move Mouse	scroll Bar (Widget 2)
...firmation_1	Left Click	scroll Bar (Widget 2)
...firmation_2	Look At	Contents (Widget 1)
...firmation_2	Think for 1.200 s	
...firmation_2	Look At	Pay (Widget 3)
...firmation_2	Left Click	

Figure 25: Getir Yemek Food Order task script

The screenshot shows a task script for 'Getir Yemek Food Order'. On the left is a screenshot of a web browser displaying the 'Confirmation' page. On the right is a 'Script Step List' table.

Frame	Action	Widget/Device
...zaOrder_10	Move Mouse	...t Button (Widget 5)
...zaOrder_10	Left Click	...t Button (Widget 5)
16- Box	Look At	Contents (Widget 1)
16- Box	Think for 1.200 s	
16- Box	Move Mouse	Confirm_Box (Widget 2)
16- Box	Left Click	Confirm_Box (Widget 2)
...confirmation	Look At	Contents (Widget 1)
...confirmation	Think for 1.200 s	
...confirmation	Move Mouse	Scroll Button (Widget 2)
...confirmation	Left Click	Scroll Button (Widget 2)
...firmation_2	Look At	Contents (Widget 1)
...firmation_2	Think for 1.200 s	
...firmation_2	Move Mouse	Scroll Button (Widget 2)
...firmation_2	Left Click	Scroll Button (Widget 2)
...firmation_3	Look At	Contents (Widget 1)
...firmation_3	Think for 1.200 s	
...firmation_3	Move Mouse	Scroll Button (Widget 2)
...firmation_3	Left Click	Scroll Button (Widget 2)
...firmation_4	Move Mouse	AtDoor (Widget 4)
...firmation_4	Left Click	AtDoor (Widget 4)
...firmation_4	Think for 1.200 s	
...firmation_4	Move Mouse	..._Button (Widget 5)
...firmation_4	Left Click	..._Button (Widget 5)
...firmation_4	Think for 1.200 s	

Figure 26: Yemek Sepeti Food Order task script

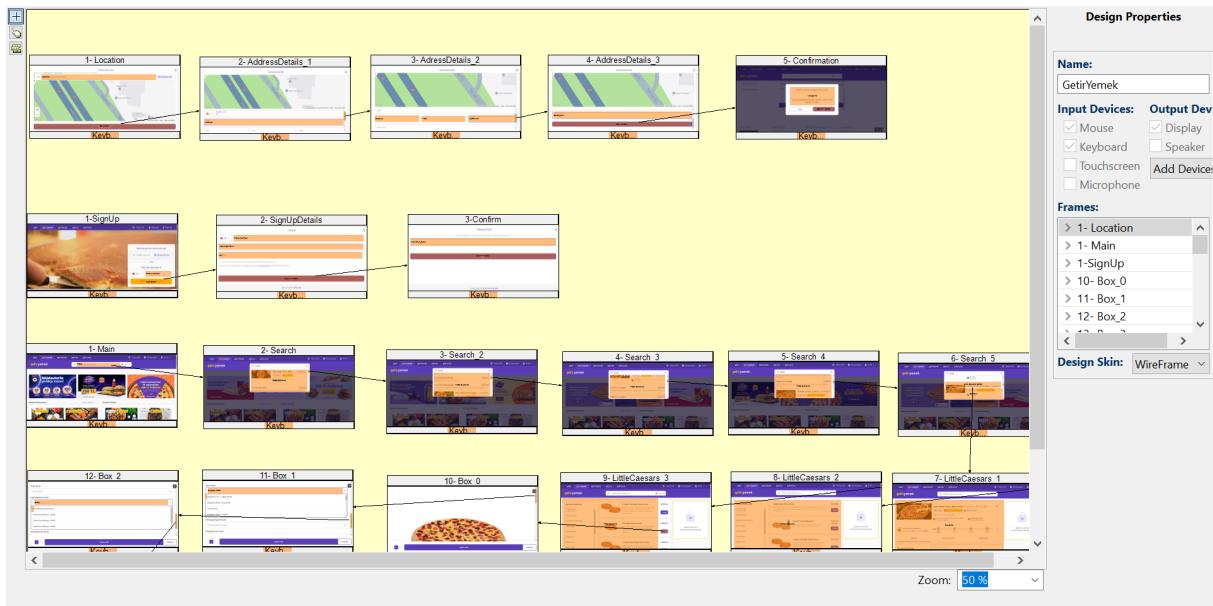


Figure 27: Getir Yemek Desing



Figure 28: Yemek Sepeti Desing

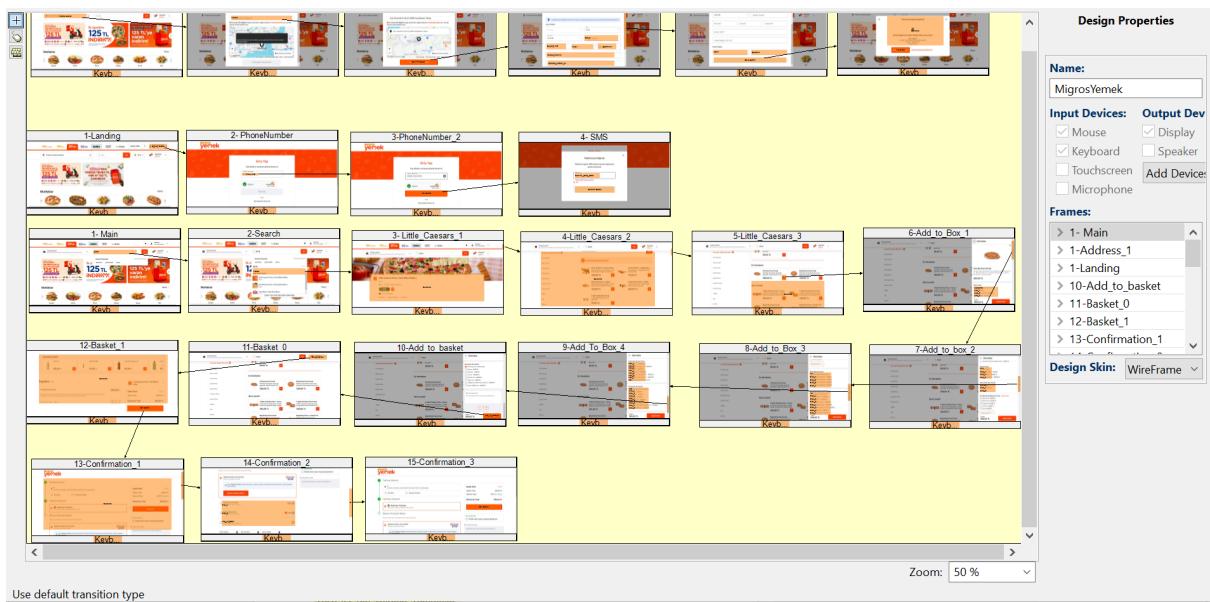


Figure 29: Migros Yemek Desing

Tasks	GetirYemek	YemekSepeti	MigrosYemek
Address Entry	45.8 s	19.2 s	44.7 s
Sign-Up	24.2 s	12.9 s	10.6 s
Food Order	37.1 s	37.2 s	23.8 s

Figure 30: Task Completion Times